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*Nanette S. Edwards*  
*Chief Counsel and Director of Legal Services*

February 22, 2011

**VIA ELECTRONIC FILING**

Ms. Jocelyn Boyd  
Chief Clerk & Administrator  
**Public Service Commission of South Carolina**  
101 Executive Center Drive  
Columbia, South Carolina 29210

Re: Petition of South Carolina Electric & Gas Company for Updates and Revisions to  
Schedules Related to the Construction of a Nuclear Base Load Generation Facility at  
Jenkinsville, South Carolina  
**Docket No. 2010-376-E**

Dear Ms. Boyd:

In accordance with Commission Order Nos. 2010-795 and 2011-127, the South Carolina Office of Regulatory Staff ("ORS") is filing both a public and a confidential version of Exhibits MWC-2, MWC-4, MWC-5, and MWC-7, as these exhibits refer to amounts that have been designated as confidential.

Respectfully submitted,

  
Nanette S. Edwards

cc: Parties of Record

# **THE OFFICE OF REGULATORY STAFF**

## **DIRECT TESTIMONY**

**OF**

**MARK W. CRISP, PE**

**FEBRUARY 22, 2011**



**DOCKET NO. 2010-376-E**

**Petition of South Carolina Electric & Gas Company  
for Updates and Revisions to Schedules Related to  
the Construction of a Nuclear Base Load Generation  
Facility at Jenkinsville, South Carolina**

**DIRECT TESTIMONY OF**

**MARK W. CRISP, PE**

**FOR**

**THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF**

**DOCKET NO: 2010-376-E**

**IN RE: PETITION OF SOUTH CAROLINA ELECTRIC & GAS COMPANY  
FOR UPDATES AND REVISIONS TO SCHEDULES RELATED TO THE  
CONSTRUCTION OF A NUCLEAR BASE LOAD GENERATION FACILITY AT  
JENKINSVILLE, SOUTH CAROLINA**

**Q.    PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

**A.**    My name is Mark W. Crisp. I am the Managing Consultant of C. H. Guernsey & Company. My business address is 1100 Circle 75 Parkway, Suite 1530, Atlanta, Georgia 30339.

**Q.    PLEASE PROVIDE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

**A.**    I graduated from the Georgia Institute of Technology (Ga. Tech) with a degree in Civil Engineering. In addition to my studies in Civil Engineering, I also completed post graduate studies in Finance and Accounting. Following completion of my formal education, I was employed for seventeen (17) years by Arkansas Power & Light (Middle South Utilities now Entergy – Arkansas) and Georgia Power Company/Southern Company. During this time, I completed assignments in the planning, siting, design, construction, and operations of nuclear, coal and hydroelectric generating plants. In addition to my utility operating experience, I was also responsible for technical due diligence on

1        Southern Company's International Acquisition Team. In this capacity I was  
2        responsible for evaluating all operating, environmental, staffing and operational  
3        aspects of power generating facilities, worldwide, that were the focus of Southern  
4        Company's acquisition strategy.

5        Following my employment in the utility industry, I became a consultant providing  
6        services to electric, water, wastewater and natural gas utilities and regulatory  
7        bodies throughout the continental U.S., Hawaii, Alaska and internationally. I  
8        continue to provide these services and hold the position of Managing Consultant  
9        at C. H. Guernsey & Co where I am responsible for overall operations of the  
10       Atlanta Regional Office. A list of major electric generating facilities I have been  
11       involved with are set forth in Exhibit MWC-1. I am a registered professional  
12       engineer licensed in Georgia and Florida.

13    **Q.    HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**  
14    **SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?**

15    **A.**    Yes. I was the lead consultant on the panel of experts providing testimony on  
16       behalf of the South Carolina Office of Regulatory Staff ("ORS") before the  
17       Commission in the South Carolina Electric & Gas Company ("SCE&G" or  
18       "Company") Base Load Hearing in Docket No. 2008-196-E. I also provided  
19       testimony in Docket 2009-293-E, which dealt with SCE&G's request to revise its  
20       construction schedule. In addition, I have testified before several other state  
21       commissions, the Federal Energy Regulatory Commission ("FERC"), the United  
22       States Congress, and several Federal Courts in the capacity of an expert witness.

23    **Q.    WHAT IS C. H. GUERNSEY'S ASSIGNMENT IN THIS PROCEEDING?**

1    A.    C. H. Guernsey's assignment is to assist ORS in its monitoring and tracking of the  
2           construction schedule and budget related to SCE&G's V. C. Summer Units 2 & 3.

3    Q.    **WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
4           **PROCEEDING?**

5    A.    The purpose of my testimony is to provide a technical review of SCE&G's  
6           Petition for Updates and Revisions to Schedules Related to the Construction of a  
7           Nuclear Base Load Generation Facility at Jenkinsville, South Carolina, known as  
8           V.C. Summer Units 2 & 3.

9    Q.    **PLEASE PROVIDE AN OVERVIEW OF THE CHANGES REQUESTED**  
10          **IN THE COMPANY'S FILING.**

11   A.    Removal of Contingency Dollars: Order Nos. 2009-104(A) and 2010-12 included  
12          the approval of a category of dollars titled "Contingency." The South Carolina  
13          Energy Users Committee ("SCEUC") filed an appeal with the South Carolina  
14          Supreme Court contesting the legality of a Contingency Fund. The South Carolina  
15          Supreme Court, in South Carolina Energy Users Comm. v. South Carolina Pub.  
16          Serv. Comm'n, 388 S.C. 486, 697 S.E.2d 587 (2010), ruled in favor of the  
17          SCEUC. As a result of the Supreme Court's Order, SCE&G was required to  
18          remove the Contingency Fund from the Capital Cost Forecast. This resulted in the  
19          removal of \$438 Million.

20    Removal of Contingency Escalation: Included in the cash flow projection was an  
21          amount the Company called Contingency Escalation. The Contingency Escalation  
22          figure only existed as an adjustment to the Contingency Fund and was therefore  
23          also disallowed by the Supreme Court Order. The Company was therefore

1        required to reduce the cash flow projection by an additional \$217 Million which  
2        was the calculated escalation on contingency.

3        Increase Project Capital Costs: SCE&G has identified and projects increases to  
4        capital costs of \$174 Million. These are additional dollars which increase the cost  
5        of the project. EPC<sup>1</sup> Change Orders between SCE&G and the Consortium<sup>2</sup> and  
6        Non-EPC cost increases are \$16.4 Million of the \$174 Million. Additional work  
7        in the Unit 1 switchyard, which is also a Non-EPC cost, has increased the  
8        Transmission Costs by approximately \$13 Million and the Owner's cost has  
9        increased by \$145 Million. In total, increased capital costs are calculated at  
10       approximately \$174 Million.

11    **Q.    PLEASE DESCRIBE SCE&G'S REQUEST AND ITS IMPLICATIONS.**

12    **A.**    SCE&G is requesting an order approving updates and revisions to cost schedules  
13       related to the construction of V. C. Summer Units 2 & 3 at its Jenkinsville, SC  
14       site. The updated capital cost schedule is proposed to supersede the capital cost  
15       schedule found in Commission Order No. 2010-12.

16       The SCE&G filing before the Commission in this Docket:

- 17           1. Removes \$438 Million in Contingency Dollars from the Capital Cost  
18           Schedule in compliance with the order of the South Carolina Supreme  
19           Court in South Carolina Energy Users Comm., 388 S.C. 486;
- 20           2. Removes \$217 Million in Contingency Escalation from the Capital Cost  
21           Schedule in compliance with the order of the South Carolina Supreme  
22           Court in South Carolina Energy Users Comm., 388 S.C. 486;

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<sup>1</sup> Engineering, Procurement, and Construction Agreement ("EPC")

<sup>2</sup> The Consortium consists of Westinghouse Electric Company and Stone & Webster, a part of the Shaw Group.

3. Increases capital costs by \$ 174 Million for the following items:

- Increases in SCE&G Owners Cost of \$ 145 Million;
- Increases in EPC Change Orders and Non-EPC costs of \$16 Million; and
- Increases in Transmission costs of \$13 Million.

**Q.    WHAT IS THE NET EFFECT OF THE COMPANY'S REQUEST IN TERMS OF 2007 DOLLARS?**

**A.**    The net effect based on 2007 Dollars with the removal of all contingencies and escalations associated with contingencies is an increase in the Total Base Project Cost from \$4.1 Billion to \$4.3 Billion as shown in Exhibit MWC-2.

**Q.    WHAT IS THE EFFECT IN TERMS OF GROSS CONSTRUCTION COST?**

**A.**    Including project escalation, revised project cash flow, and Allowance for Funds Used During Construction ("AFUDC"), Gross Construction costs have changed from the \$6.2 Billion approved in Order No. 2010-12 to the current figure of \$5.8 Billion as set forth in my Exhibit MWC-2.

**Q.    HAVE YOU REVIEWED COMPANY RECORDS TO ENSURE SCE&G'S REQUEST REMOVES BASE CONTINGENCY DOLLARS AS WELL AS CONTINGENCY DOLLARS ASSOCIATED WITH ESCALATION?**

**A.**    Yes. I have reviewed the Company's filing, the information supporting their request, data provided by the Company and all exhibits included in the Company's filing. I have also analyzed the contingency and contingency escalation that the Company has reported in earlier filings. I confirmed the

1            Company has removed all dollars characterized as contingency and all dollars  
2            characterized as contingency escalation. This amounts to a total of \$655 Million.

3    **Q.    COULD YOU PLEASE DISCUSS YOUR REVIEW OF THE COMPANY'S**  
4            **REQUEST TO INCREASE PROJECT CAPITAL COSTS BY \$174**  
5            **MILLION?**

6    **A.**    Yes. The Company has identified \$145 Million in increases to the Owner's Cost  
7            category. Details of these cost increases are identified in my Exhibit MWC-3.  
8            These costs are the direct responsibility of the Company and are not influenced by  
9            the EPC contract. The single largest of these increases is for "Onsite Training &  
10           Startup/SCE&G Labor" which is integral to ensuring that the plants will be  
11           operated and maintained safely and efficiently. There are a number of reasons for  
12           the increases in training and labor. As one example, the Company has recognized  
13           that it will need to start specialized training of operational personnel earlier than  
14           planned which requires employees to attend these training courses at a  
15           Westinghouse facility as opposed to on-site training at V.C. Summer. Also, the  
16           Company identified that there are additional costs to track project costs and to  
17           ensure that payments to Westinghouse/Shaw are appropriate, and, therefore, this  
18           results in an increase in the forecast of labor costs. We would also note that the  
19           Company identified certain costs that cannot be billed to Santee Cooper.  
20           Examples of these types of costs include costs associated with the Company's  
21           investor relations and other regulatory costs not required of Santee Cooper but are  
22           costs related to the building of Units 2 and 3. In summary, the Company



1            reexamined its original estimates, identified additional costs and costs that cannot  
2            be shared, and determined that these increases to Owners' Costs are necessary.

3    **Q.    COULD YOU PLEASE DISCUSS YOUR FINDINGS RELATED TO THE**  
4    **COMPANY'S EPC CHANGE ORDERS AND NON-EPC COSTS?**

5    **A.**    Exhibit MWC-4 to my testimony details the cost impacts due to the eleven (11)  
6            Change Orders. These changes have been incurred in order to improve  
7            construction and overall plant functionality. In addition to the EPC cost increases  
8            identified in the Change Orders, the Company is also requesting increases to Non-  
9            EPC costs and Transmission projects. As set forth in my Exhibit MWC-4, the  
10           total cost of all Change Orders, Non-EPC costs and Transmission projects equals  
11           \$29 Million.

12   **Q.    DESCRIBE THE PROPOSED INCREASES IN TRANSMISSION COSTS.**

13   **A.**    An additional cost increase that is not in the EPC category nor is it captured  
14           directly in the Owners Cost is an increase in costs associated with Transmission  
15           projects necessary to support Units 2 & 3. These costs are necessary to facilitate  
16           the switchyard operation meeting safety standards required by the NRC and the  
17           Industry. These costs although previously designated to be split with Santee  
18           Cooper have subsequently been determined to be assigned to SCE&G.

19   **Q.    ARE THESE COST INCREASES REASONABLE?**

20   **A.**    Yes. We determined from our review of the cost increases associated with the  
21           Owner's Cost Category, EPC Change Orders, Non-EPC costs and Transmission  
22           projects that these costs are reasonable.

1    **Q.    COMPANY WITNESS WALKER TESTIFIES THAT \$10 MILLION OF**  
2    **THE REQUESTED INCREASE IN CHANGE ORDERS IS DUE TO A**  
3    **NEGOTIATED “RISK COMPENSATION PAYMENT” PAYABLE TO**  
4    **THE CONSORTIUM. PLEASE EXPLAIN.**

5    **A.**    Pursuant to an agreement and as reflected in Change Order 8, the Company has  
6    agreed to pay a \$10 Million payment to shift \$315 Million from the Target Cost  
7    Category to the Fixed or Firm Cost Category. In addition, the Company also  
8    reached agreement that the Consortium would forego escalation on \$69 Million of  
9    the \$315 Million. Conservatively estimated, using Handy-Whitman escalation  
10   rates, the Company has avoided approximately \$8.6 Million in escalation. In  
11   addition to these avoided costs there were other cost savings or deferrals of  
12   approximately \$12 Million that the Company benefitted from as a result of the  
13   agreement.

14   **Q.    PLEASE DISCUSS THESE ADDITIONAL SAVINGS OR DEFFERALS.**

15   **A.**    Considering that \$315 Million in cost items were moved from the Target Cost  
16   Category to Fixed or Firm Cost Category, the Company found it reasonable to  
17   assume that a conservative estimate for avoidance of litigation or mediation costs  
18   was \$5 to \$6 Million. As shown in Exhibit MWC-5, the total conservative  
19   estimate for avoided costs as a result of the agreement is approximately \$20  
20   Million. Exhibit MWC-5 identifies five (5) areas that the negotiated agreement  
21   results in avoided costs. Considering the \$8.6 Million in savings realized due to  
22   reductions in escalation plus the conservative estimates of \$12 Million in avoided  
23   costs of the additional four (4) items yields a total avoided cost benefit of \$20

1            Million. In light of these benefits and the future substantial reduction in risk, the  
2            \$10 Million risk compensation payment is reasonable.

3    **Q.    IS THE INCREASE OF \$174 MILLION AN INCREASE TO THE**  
4            **PROJECT IN 2007 DOLLARS?**

5    **A.**    Yes. We would note that the requested \$174 Million is less than the \$438 Million  
6            in Contingency dollars approved in Commission Order Nos. 2009-104(A) and  
7            2010-12. My Exhibit MWC-6 provides a summary of the increases.

8    **Q:    HAVE YOU PREPARED AN EXHIBIT SHOWING A SUMMARY OF**  
9            **ALL COST REVISIONS IN THE COMPANY'S REQUEST?**

10   **A.**    Yes. Exhibit MWC-7 shows the full project cash flow comparison between the  
11            figures reflected in Order No. 2010-12 (with Contingency and Contingency  
12            Escalation dollars removed) and the changes requested by the Company and the  
13            effects of those changes if the Company's request is approved.

14   **Q.    DO YOU RECOMMEND THE COMMISSION APPROVE THE**  
15            **COMPANY'S PETITION?**

16   **A.**    Yes. Based on our review of the Company's filing, the supporting documentation,  
17            in-depth review of each modification, and discussions with SCE&G, we  
18            recommend granting the Company's request.

19   **Q.    DOES THIS CONCLUDE YOUR TESTIMONY?**

20   **A.**    Yes. However, for clarification, we would note that the Petition at page 6,  
21            paragraph 18, states that SCE&G has reclassified approximately \$114.6 million in  
22            Owner's Costs rather than the \$145 Million in Owner's Costs that are identified in  
23            Company Witness Walker's testimony at page 29. We inquired about this

1           discrepancy, and it is our understanding that the Company will correct the  
2           scrivener's error from the stand at hearing.

## **Mark W. Crisp, PE**

### **Power Plant Experience**

#### **Nuclear Power Generating Facilities**

Plant Vogtle – Georgia Power Company (Southern Nuclear)  
Plant Hatch – Georgia Power Company (Southern Nuclear)  
Plant Farley – Alabama Power Company (Southern Nuclear)  
North Anna Power Station – Dominion Resources  
Bellefonte – Tennessee Valley Authority

#### **Coal-fired Generating Facilities**

Plant Bowen – Georgia Power Company  
Plant Branch – Georgia Power Company  
Plant Hammond – Georgia Power Company  
Plant McDonough – Georgia Power Company  
Plant Mitchell – Georgia Power Company  
Colbun – Chile S.A.  
Mejionelles – Chile S.A.  
Puerto Rican Electric Power Authority San Juan, Puerto Rico

#### **Hydro-electric Generating Facilities**

Wallace Dam – Georgia Power Company  
Sinclair Dam – Georgia Power Company  
Rocky Mountain Pumped Storage Project – Georgia Power Company  
Bartlett's Ferry Dam – Georgia Power Company  
Oliver Dam – Georgia Power Company  
Jackson Dam – Georgia Power Company  
Allatoona Dam – U.S. Army Corps of Engineers  
Buford Dam – U.S. Army Corps of Engineers  
Carter's Dam – U.S. Army Corps of Engineers  
Hartwell Dam – U.S. Army Corps of Engineers  
Richard Russell Pumped Storage Project – U.S. Army Corps of Engineers  
Strom Thurmond Dam – U.S. Army Corps of Engineers  
West Point Dam – U.S. Army Corps of Engineers  
W. F. George Dam – U.S. Army Corps of Engineers  
Jim Woodruff Dam – U.S. Army Corps of Engineers  
Wolf Creek Dam – U.S. Army Corps of Engineers  
Center Hill Dam – U.S. Army Corps of Engineers  
Texoma Dam – U.S. Army Corps of Engineers  
Dennison Dam – U.S. Army Corps of Engineers  
Amistad Dam – International Boundary Waters Commission  
Falcon Dam – International Boundary Waters Commission

Revisions to Capital Cost Schedules  
(\$000)

	Order 2010-12*	Change	2010-376-E
Plant Cost Categories	<u>Total</u>	<u>Total</u>	<u>Total</u>
Fixed with No Adjustment		\$61,578	
Firm with Fixed Adjustment A		\$0	
Firm with Fixed Adjustment B		\$542	
Firm with Indexed Adjustment		\$268,753	
Actual Craft Wages {Target}		(\$50,035)	
Non-Labor Costs {Target}		(\$264,897)	
Time & Materials		\$428	
Owners Costs	\$286,067	\$144,581	\$430,648
Transmission Costs	\$308,592	\$13,000	\$321,591
Total Base Project Costs (2007 \$)	\$4,096,457	\$173,949	\$4,270,405
Total Project Escalation	\$1,807,948	(\$542,632)	\$1,265,317
<b>Total Revised Project Cash Flow</b>	\$5,904,405	(\$368,683)	\$5,535,722
AFUDC(Capitalized Interest)	\$283,721**	\$19,053	\$302,775
Gross Construction	\$6,188,126	(\$349,629)	\$5,838,497

\*Order No. 2010-12 Adjusted for Removal of Contingency Fund and Associated Escalation

\*\* The AFUDC after removing contingency fund and associated escalation.

Due to rounding, the amounts contained may not precisely reflect the amounts specified in testimony or other exhibits.

**Owners Cost Budget Comparative Analysis**  
(\$000) Dollars Reflect SCE&G 55% share

Description	Original Budget	Updated Budget	Variance
Onsite Training & Startup/SCE&G Labor (Cost for recruiting & deploying qualified team, increase in amount of labor needed)	\$124,088	\$188,130	\$64,042
Insurance (workers comp, builder's risk insurance)	\$57,750	\$58,863	\$1,113
Sales Tax (Taxes that will not be shared with Santee Cooper)	\$9,350	\$9,352	\$2
Licensing/Permits/NRC Inspection Fees (Increase in time & effort, increase in cost of NRC inspection fees)	\$36,850	\$51,556	\$14,706
General & Administrative (increased to reflect the size and complexity of project)	\$22,002	\$74,706	\$52,704
Non-EPC Construction (Nuclear Operations Building, Nuclear Learning Center)	\$9,490	\$20,820	\$11,331
Spare Parts (List provided from WEC of critical and required spare parts for SCE&G to maintain to ensure reliable operation of the Units)	\$8,326	\$8,326	\$0
Plant Equipment, Tools, Maintenance Materials, Consumables, & Supplies	\$16,390	\$16,215	(\$175)
NuStart AP10000 Member Group (Share Cost of Reference Plant Portions of the COLA)	-	\$2,235	\$2,235
Met Tower, Plant Site Layout. Pre EPC Project Management (Data tower for environmental characterization of the site - before construction) Actual Cost Spent	\$447	\$447	\$0
Real Estate / Property Taxes (Agreement with Fairfield County reduces category to zero)	\$275	-	(\$275)
Electricity (Charged to Company use account - not to be recorded to the work order)	\$1,100	-	(\$1,100)
<b>Total</b>	<b>\$286,068</b>	<b>\$430,650</b>	<b>\$144,583</b>

Due to rounding, the amounts contained may not precisely reflect the amounts specified in testimony or other exhibits.

**Change Orders, Non EPC Cost, and Transmission**  
Dollars Reflect SCE&G 55% share (\$000)

<b>Change Orders</b>		
	<b>Description</b>	<b>Dollar Impact</b>
Change Order #1	Simulator Training	No Cost Impact
Change Order #2	Limited Scope Simulator	
Change Order #3	Parr Road	
Change Order #4	Not Executed	
Change Order #5	Simulator Training	No Cost Impact
Change Order #6	Hydranuts	No Cost Impact
Change Order #7	Switchyard Communications	
Change Order #8	Target to Firm Shift	
Change Order #9	Switchyard Redesign	
Change Order #10	P3 Software	
Change Order #11	Schedule Impact Study	No Cost Impact
<b>Subtotal of Change Orders</b>		<b>\$11,508</b>

<b>Additional Non EPC Cost Items</b>		
	<b>Description</b>	<b>Dollar Impact</b>
	Alternate A/C Line Cost transferred to Unit 1	(\$352)
	Switchyard not Split with Santee Cooper 55/45	\$5,211
<b>Subtotal of Non EPC Cost Items</b>		<b>\$4,859</b>

<b>Transmission</b>		
	<b>Description</b>	<b>Dollar Impact</b>
	Unit 1 Switchyard Redesign	\$13,000
<b>Subtotal of Transmission</b>		<b>\$13,000</b>

<b>Change Orders, Non EPC Cost, and Transmission</b>		<b>\$29,367</b>
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Due to rounding, the amounts may not precisely reflect the amounts specified in testimony or other exhibits.



## Examination of Change Order #8 And Risk Compensation Payment

Dollars Reflect SCE&amp;G 55% share

Item No.	Shaw Work Scope Description	Cost Moved from Target to Firm
1	Site Design Engineering Group Labor, labor Burdens and OH Recovery	
2	Living Allowances & Relocations for All FNM's including QA/QC (business travel expenses not included)(Start-up support excluded)	
3	Construction Equipment (includes maintenance labor, parts and supplies)	
4	Heavy Lift Derrick (excluding Shaw assembly labor, operators, fuel, foundation labor and subcontractors)	
5	Switchyard (excl. grading and Shaw labor)	
6	Office equipment and supplies	
7	Cooling Towers	
8	Module Assembly Building (transfer is target cost of slabs only)	
9	On-Site Assembly of Structural Modules CA01-05 and CA20	
10	Safety Program	
11	Advertising and Public Relations	
<b>Sum of Cost that Moved from Target to Firm</b>		<b>\$314,693,199</b>

## Quantifiable Benefits for Change Order #8

	Description	55%
1	Westinghouse/Shaw Agreement to forego escalation after August 2010 on \$69 million of the \$315 million of the Change Order No. 8 EPC Contract Cost. *	\$8,600,000
2	Settlement of the Heavy Lift Derrick (HLD) dispute (arbitration costs and fees)	\$1,000,000
3	Settlement of the Heavy Lift Derrick (HLD) dispute (Claim Amount)	\$5,000,000
4	Shaw holds the financial risk for Relocation of the HLD	\$5,000,000
5	Prudent Oversight of costs related to the 11 scopes of work	\$1,000,000
<b>Sum of Potential Avoided Cost</b>		<b>\$20,600,000</b>
<b>Risk Premium</b>		<b>\$10,040,661</b>
<b>Net Avoided Savings</b>		<b>\$10,559,339</b>

\* This number is using the three-year Handy Whitman escalation rate of 3.89%. Escalation rate is an estimate at this time. Due to rounding, the amounts may not precisely reflect the amounts specified in testimony or other exhibits.

Due to rounding, the amounts may not precisely reflect the amounts specified in testimony or other exhibits.

Summary of Increases  
Dollars Reflect SCE&G 55% share (\$000)

Category	Description
Change Order #2	Limited Scope Simulator
Change Order #3	Parr Road
Change Order #7	Switchyard Communications
Change Order #8	Target to Firm Shift
Change Order #9	Switchyard Redesign
Change Order #10	P3 Software
Change Order #11	Schedule Impact Study
Non EPC Cost Item	Alternate A/C Line Cost transferred to Unit 1
Non EPC Cost Item	Switchyard not Split with Santee Cooper 55/45
<b>Subtotal of Change Orders and Non EPC Cost Items</b>	
<b>\$16,367</b>	

Category	Description
Transmission	Unit 1 Switchyard Redesign
<b>Subtotal of Transmission</b>	
<b>\$13,000</b>	

Category	Description
Owners Cost	Owners Cost Variance - Labor
Owners Cost	Owners Cost Variance - Non Labor
Owners Cost	Cost not Split 55/45
<b>Subtotal of Change Orders and Non EPC Cost Items</b>	
<b>\$144,583</b>	

<b>Total Increases</b>	
<b>\$173,950</b>	

Due to rounding, the amounts contained may not precisely reflect the amounts specified in testimony or other exhibits.

Updates and Revisions to Capital Cost Schedules  
Dollars Reflect SCE&G 55% share (\$000)  
V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Actual through September 2010* plus Projected													
Plant Cost Categories	Total	Actual			Projected								
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Fixed with no Adjustment</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Firm with Fixed Adjustment A</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Firm with Fixed Adjustment B</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Firm with Indexed Adjustment</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Actual Craft Wages</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Non-Labor Costs</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Time &amp; Materials</b>													
Order 2010-12**													
Docket 2010-376-E													
Change													
<b>Owners Costs</b>													
Order 2010-12**	286,067	17,096	8,224	14,225	21,404	18,656	22,179	30,551	35,434	42,773	27,663	23,646	24,216
Docket 2010-376-E	430,648	17,096	8,198	15,206	40,679	36,376	48,534	43,730	48,720	64,791	35,163	37,452	34,703
Change	144,581	-	(26)	981	19,275	17,720	26,355	13,179	13,286	22,018	7,500	13,806	10,487
<b>Transmission Costs</b>													
Order 2010-12**	308,592	-	27	555	1,502	3,043	4,864	9,947	24,850	37,443	43,451	81,739	101,171
Docket 2010-376-E	321,591	-	26	724	2,604	5,532	7,775	12,095	29,822	35,236	43,035	73,678	111,064
Change	12,999	-	(1)	169	1,102	2,489	2,911	2,148	4,972	(2,207)	(416)	(8,061)	9,893
<b>Total Base Project Costs (2007 \$)</b>													
Order 2010-12**	4,096,457	21,724	97,495	325,826	392,677	444,400	614,959	614,378	488,205	412,858	302,460	186,739	194,736
Docket 2010-376-E	4,270,405	21,724	97,387	319,074	444,235	415,743	679,423	633,789	487,059	457,153	303,697	196,686	214,435
Change	173,949	-	(108)	(6,753)	51,557	(28,657)	64,464	19,411	1,146	44,296	1,238	9,947	19,699
<b>Total Project Escalation</b>													
Order 2010-12**	1,807,948	-	3,411	22,687	60,248	98,433	201,389	265,643	263,823	261,121	240,721	174,229	216,243
Docket 2010-376-E	1,265,317	-	3,519	20,930	30,363	61,535	152,883	193,691	184,263	199,753	160,816	114,024	143,540
Change	(542,632)	-	108	(1,758)	(29,885)	(36,898)	(48,507)	(71,952)	(79,559)	(61,368)	(79,905)	(60,205)	(72,703)
<b>Total Revised Project Cash Flow</b>													
Order 2010-12**	5,904,405	21,724	100,906	348,513	452,925	542,833	816,348	880,021	752,028	673,979	543,181	360,968	410,979
Docket 2010-376-E	5,535,722	21,724	100,906	340,004	474,598	477,278	832,306	827,480	671,322	656,906	464,513	310,710	357,975
Change	(368,683)	-	-	(8,511)	21,672	(65,555)	15,957	(52,541)	(78,413)	(17,072)	(78,667)	(50,258)	(53,004)
<b>Cumulative Project Cash Flow Revised</b>													
Order 2010-12**	-	21,723	122,628	471,142	924,067	1,466,900	2,283,248	3,163,268	3,915,296	4,589,275	5,132,456	5,493,424	5,904,406
Docket 2010-376-E	-	21,723	122,629	462,632	937,229	1,414,507	2,246,813	3,074,292	3,745,615	4,402,522	4,867,036	5,177,746	5,535,721
Change	-	-	-	(8,510)	13,161	(52,393)	(36,435)	(88,976)	(169,681)	(186,753)	(265,421)	(315,678)	(368,682)
<b>AFUDC (Capitalized Interest)</b>													
Order 2010-12**	283,721	645	3,496	14,743	21,378	25,331	32,884	41,597	40,967	35,060	23,273	20,082	24,265
Docket 2010-376-E	302,775	645	3,497	10,564	19,858	31,541	38,987	49,316	45,799	37,758	21,427	21,579	21,804
Change	19,053	-	-	(4,179)	(1,520)	6,210	6,103	7,719	4,832	2,698	(1,846)	1,497	(2,461)
<b>Gross Construction</b>													
Order 2010-12**	6,188,126	22,368	104,403	363,256	474,304	568,163	849,232	921,618	792,995	709,039	566,455	381,049	435,244
Docket 2010-376-E	5,838,497	22,368	104,403	350,567	494,456	508,819	871,293	876,795	717,122	694,665	485,941	332,289	379,779
Change	(349,629)	-	-	(12,689)	20,152	(59,344)	22,061	(44,823)	(75,873)	(14,374)	(80,514)	(48,760)	(55,465)
<b>Construction Work in Progress</b>													
Order 2010-12**	-	22,368	126,771	490,027	964,331	1,532,494	2,381,726	3,303,344	4,096,339	4,805,378	5,371,833	5,752,882	6,188,126
Docket 2010-376-E	-	22,368	126,771	477,338	971,794	1,480,613	2,351,906	3,228,701	3,945,822	4,640,487	5,126,427	5,458,717	5,838,496
Change	-	-	-	(12,689)	7,463	(51,882)	(29,821)	(74,644)	(150,516)	(164,891)	(245,404)	(294,164)	(349,629)

\*Applicable index escalation rates for 2010 are estimated. Escalation is subject to restatement when actual indices for 2010 are final.

\*\*Due to rounding, the amounts may not precisely reflect the amounts specified in testimony or other exhibits.

AFUDC rates will vary with changes in market interest rates, SCE&G's embedded cost of capital, capitalization ratios, construction work in progress, and SCE&G's short-term debt outstanding.

\*\*Order No. 2010-12 Adjusted for Removal of Contingency Fund and Associated Escalation